

## 0208524090 MOUNTAIN CREEK AT SECONDARY ROAD 1617 NEAR BAHAMA, NC

LOCATION.--Lat 36°08'59", long 78°53'48", Durham County, Hydrologic Unit 03020201, on right bank at bridge on Secondary Road 1617 and 1.6 mi southwest of Bahama.

DRAINAGE AREA.--8.0 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1994 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 370 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Maximum gage height for period of record from floodmarks. Maximum gage height for period of record occurred Sept. 6, 1996, discharge not determined. No flow occurred on many days during the period.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

| DAY   | OCT      | NOV   | DEC   | JAN   | FEB   | MAR     | APR   | MAY   | JUN   | JUL   | AUG    | SEP   |
|-------|----------|-------|-------|-------|-------|---------|-------|-------|-------|-------|--------|-------|
| 1     | 0.17     | 8.7   | 3.9   | 23    | 13    | 30      | 17    | 5.1   | e6.0  | 12    | 1.8    | 12    |
| 2     | 0.17     | 6.8   | 3.8   | 22    | 9.2   | 48      | 13    | 5.3   | 4.9   | 107   | 6.0    | 4.0   |
| 3     | 0.16     | 5.1   | 3.8   | 19    | 7.4   | 23      | 11    | 4.2   | 4.7   | 29    | 3.2    | 2.5   |
| 4     | 0.16     | 5.6   | 3.7   | 15    | 8.6   | 16      | 9.2   | 3.9   | 38    | 12    | 2.0    | 9.3   |
| 5     | 0.16     | 6.2   | 77    | 12    | 7.6   | 16      | 10    | 4.2   | 22    | 7.2   | 2.2    | 14    |
| 6     | 0.14     | 33    | 36    | 11    | 6.7   | 41      | 8.9   | 5.6   | 9.2   | 5.4   | 1.9    | 5.0   |
| 7     | 0.13     | 13    | 25    | 9.3   | 46    | 22      | 139   | 4.5   | 25    | 4.9   | 9.9    | 3.5   |
| 8     | 0.11     | 8.2   | 17    | 9.0   | 22    | 16      | 43    | 3.7   | 50    | 4.2   | 6.4    | 3.2   |
| 9     | 0.13     | 6.6   | 14    | 8.6   | 13    | 14      | 297   | 3.2   | 54    | 3.7   | 35     | 3.0   |
| 10    | 0.39     | 5.8   | 12    | 8.1   | 13    | 15      | 128   | 2.9   | 15    | 3.7   | 48     | 2.5   |
| 11    | 740      | 7.1   | 22    | 7.2   | 11    | 11      | 50    | 2.8   | 9.2   | 3.1   | 41     | 2.0   |
| 12    | 31       | 36    | 18    | 6.6   | 9.1   | 9.3     | 25    | 2.5   | 7.5   | 3.0   | 9.1    | 1.6   |
| 13    | 9.7      | 27    | 77    | 6.4   | 7.4   | 9.1     | 17    | 1.9   | 7.2   | 2.9   | 5.6    | 1.7   |
| 14    | 6.6      | 13    | 40    | 6.2   | 7.2   | 10      | 13    | 1.8   | 6.3   | 3.9   | 4.3    | 1.9   |
| 15    | 5.1      | 9.1   | 18    | 5.6   | 7.9   | 9.3     | 12    | 3.0   | 5.6   | 3.1   | 4.1    | 1.7   |
| 16    | 45       | 10    | 12    | 4.6   | 9.6   | 36      | 10    | 5.2   | 7.3   | 2.6   | 4.0    | 1.5   |
| 17    | 15       | 43    | 9.8   | 4.8   | 9.1   | 22      | 9.3   | 3.4   | 8.1   | 2.9   | 3.7    | 1.3   |
| 18    | 7.8      | 25    | 8.7   | 4.3   | 18    | 15      | 8.7   | 5.9   | 6.5   | 2.1   | 3.0    | 12    |
| 19    | 5.0      | 13    | 8.8   | 4.0   | 21    | 13      | 9.1   | 15    | 9.6   | 1.9   | 2.6    | 22    |
| 20    | 4.1      | 10    | 17    | 4.3   | 17    | e400    | 8.4   | 6.8   | 6.6   | 1.8   | 2.4    | 6.5   |
| 21    | 4.3      | 8.5   | 12    | 4.3   | 13    | e90     | 7.7   | 5.5   | 5.1   | 1.6   | 2.2    | 3.5   |
| 22    | 6.7      | 7.6   | 10    | 3.7   | 66    | e30     | 7.3   | 57    | 4.2   | 3.5   | 2.0    | 3.0   |
| 23    | 5.3      | 6.9   | 12    | 4.1   | 40    | e19     | 6.6   | 60    | 3.7   | 9.6   | 1.8    | 56    |
| 24    | 3.6      | 5.7   | 27    | 5.4   | 18    | e14     | 5.5   | 24    | 3.3   | 3.8   | 1.5    | 12    |
| 25    | 3.3      | 5.5   | 70    | 3.6   | 13    | e12     | 5.8   | 28    | 3.0   | 2.4   | 1.4    | 6.3   |
| 26    | 3.4      | 5.1   | 24    | 4.0   | 12    | 9.7     | 7.4   | 144   | 2.7   | 1.7   | 1.3    | 4.3   |
| 27    | 2.9      | 4.8   | 15    | 4.0   | 64    | 9.0     | 6.9   | 21    | 2.6   | 1.6   | 1.2    | 3.8   |
| 28    | 37       | 4.7   | 13    | 3.3   | 55    | 8.3     | 5.5   | 13    | 2.4   | 1.4   | 1.1    | 3.3   |
| 29    | 37       | 4.6   | 11    | 4.1   | ---   | 12      | 5.1   | 9.2   | 2.4   | 1.2   | 1.0    | 2.8   |
| 30    | 32       | 4.4   | 10    | 24    | ---   | 79      | 5.1   | 7.7   | 4.8   | 1.7   | 0.95   | 2.4   |
| 31    | 14       | ---   | 9.4   | 26    | ---   | 31      | ---   | 6.8   | ---   | 1.7   | 30     | ---   |
| TOTAL | 1,020.52 | 350.0 | 640.9 | 277.5 | 544.8 | 1,089.7 | 901.5 | 467.1 | 336.9 | 246.6 | 240.65 | 208.6 |
| MEAN  | 32.9     | 11.7  | 20.7  | 8.95  | 19.5  | 35.2    | 30.1  | 15.1  | 11.2  | 7.95  | 7.76   | 6.95  |
| MAX   | 740      | 43    | 77    | 26    | 66    | 400     | 297   | 144   | 54    | 107   | 48     | 56    |
| MIN   | 0.11     | 4.4   | 3.7   | 3.3   | 6.7   | 8.3     | 5.1   | 1.8   | 2.4   | 1.2   | 0.95   | 1.3   |
| CFSM  | 4.12     | 1.46  | 2.58  | 1.12  | 2.43  | 4.39    | 3.76  | 1.88  | 1.40  | 0.99  | 0.97   | 0.87  |
| IN.   | 4.75     | 1.63  | 2.98  | 1.29  | 2.53  | 5.07    | 4.19  | 2.17  | 1.57  | 1.15  | 1.12   | 0.97  |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2003, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 5.81   | 3.96   | 5.72   | 11.0   | 13.1   | 18.1   | 11.6   | 5.09   | 6.38   | 3.22   | 2.23   | 14.6   |
| MAX  | 32.9   | 11.7   | 20.7   | 27.3   | 36.2   | 49.9   | 30.0   | 15.1   | 29.7   | 7.95   | 7.76   | 74.0   |
| (WY) | (2003) | (2003) | (2003) | (1998) | (1998) | (1998) | (2003) | (2003) | (1995) | (2003) | (2003) | (1996) |
| MIN  | 0.035  | 0.061  | 0.26   | 1.51   | 1.55   | 2.74   | 1.14   | 0.19   | 0.29   | 0.097  | 0.015  | 0.18   |
| (WY) | (1999) | (1999) | (2002) | (2001) | (2002) | (2002) | (2002) | (2002) | (1999) | (2002) | (1999) | (1995) |

## NEUSE RIVER BASIN

0208524090 MOUNTAIN CREEK AT SECONDARY ROAD 1617 NEAR BAHAMA, NC—Continued

| SUMMARY STATISTICS       | FOR 2002 CALENDAR YEAR | FOR 2003 WATER YEAR | WATER YEARS 1995 - 2003 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL             | 2,609.10               | 6,324.77            |                         |
| ANNUAL MEAN              | 7.15                   | 17.3                | 8.35                    |
| HIGHEST ANNUAL MEAN      |                        |                     | 17.3                    |
| LOWEST ANNUAL MEAN       |                        |                     | 1.67                    |
| HIGHEST DAILY MEAN       | 740                    | Oct 11              | 1,000                   |
| LOWEST DAILY MEAN        | 0.00                   | Jun 13              | 0.00                    |
| ANNUAL SEVEN-DAY MINIMUM | 0.00                   | Jun 13              | 0.00                    |
| MAXIMUM PEAK FLOW        |                        | 2,680               | NOT DETERMINED*         |
| MAXIMUM PEAK STAGE       |                        | 12.07               | 12.56                   |
| INSTANTANEOUS LOW FLOW   |                        | 0.10                | 0.00                    |
| ANNUAL RUNOFF (CFSM)     | 0.89                   | 2.17                | 1.04                    |
| ANNUAL RUNOFF (INCHES)   | 12.13                  | 29.41               | 14.19                   |
| 10 PERCENT EXCEEDS       | 13                     | 36                  | 14                      |
| 50 PERCENT EXCEEDS       | 0.85                   | 7.3                 | 2.3                     |
| 90 PERCENT EXCEEDS       | 0.03                   | 1.9                 | 0.09                    |

e Estimated.

\* See REMARKS.

